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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/770,960		01/26/2001	Jo Ann H. Squier	10247	7021	
23455	7590	08/25/2004		EXAM	EXAMINER	
EXXONMO P O BOX 21		HEMICAL COMPA	SIMONE, CATHERINE A			
BAYTOWN	, TX 7	7522-2149		ART UNIT	PAPER NUMBER	
				1772		
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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	<i>></i> .
055-1-4-4	09/770,960	SQUIER ET AL.	
Office Action Summary	Examiner	Art Unit	
	Catherine Simone	1772	·
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet with the	correspondence addre	SS
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a replent fixed period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be ly within the statutory minimum of thirty (30) o will apply and will expire SIX (6) MONTHS fro s. cause the application to become ABANDOI	timely filed lays will be considered timely. om the mailing date of this commu	unication.
Status			
 1) ⊠ Responsive to communication(s) filed on 06 A 2a) ☐ This action is FINAL. 2b) ☑ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under B 	s action is non-final. nce except for formal matters, p		erits is
Disposition of Claims			
 4) ☐ Claim(s) 1-26 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-26 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or 	wn from consideration.		
Application Papers			
9) The specification is objected to by the Examine			
10) ☐ The drawing(s) filed on is/are: a) ☐ acc			
Applicant may not request that any objection to the	•	• ,	4044.10
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex			` '
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document: 2. Certified copies of the priority document: 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)).	ition No /ed in this National Staç	je
Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail [5) Notice of Informal 6) Other:	y (PTO-413) Date Patent Application (PTO-152))

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/04 has been entered.

Withdrawn Rejections

- 2. The 35 U.S.C. 102 rejection of claims 1-4, 7, 10-13, 16, 20, 22, 23 and 24 as being anticipated by Liu et al. of record in the Office Action mailed 8/4/03, Pages 2-3, Paragraph #5 has been withdrawn due to the Applicant's amendment filed 4/27/04.
- 3. The 35 U.S.C. 103 rejection of claims 14, 15, 17-19 and 21 over Liu et al. of record in the Office Action mailed 8/4/03, Pages 6-7, Paragraph #9 has been withdrawn due to the Applicant's amendment filed 4/27/04.
- 4. The 35 U.S.C. 103 rejection of claims 25 and 26 over Bright in view of Poirier of record in the Office Action mailed 8/4/03, Pages 7-8, Paragraph #10 has been withdrawn due to the Applicant's amendment filed 4/27/04.

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Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-3, 11, 12, 14-16, 20 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Duncan (4,701,369).

Regarding claims 1 and 24, Duncan discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated (see col. 7, lines 12-24) and a cold glue adhesive on the first side of the first skin layer (see col. 7, lines 65-66). Regarding claim 2, note the thermoplastic is polypropylene (see col. 3, line 22). Regarding claim 3, note the thermoplastic is polyethylene (see col. 2, line 66). Regarding claim 11, note the first skin layer comprises at least about 15% by weight of the thermoplastic label (see col. 6, lines 64-65). Regarding claim 12, note the first cavitating agent is selected from the group consisting of polyamides, nylons, polyesters, acetals, acrylic resins, solid or hollow pre-formed glass spheres, metal beads, ceramic spheres, metal spheres (see col. 5, lines 14-19). Regarding claims 14 and 15, note the label has a thickness from about 3 mils to about 5 mils and from about 1 mil to about 10 mils (see col. 6, line 47). Regarding claim 16, note the label is biaxially oriented (see col. 3, lines 33-34). Regarding claim 20, note the thermoplastic is polypropylene and the polypropylene comprises homopolymer polypropylene (see col. 2, lines 67-68).

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7. Claims 1-4, 7 and 10-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Swan et al. (4,965,123).

Regarding claims 1 and 24, Swan et al. discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated (see col. 8, lines 5-15 and lines 34-38) and a cold glue adhesive on the first side of the first skin layer (see col. 9, lines 15-39). Regarding claim 2, note the thermoplastic is polypropylene (see col. 11, lines 10-12). Regarding claim 3, note the thermoplastic is polyethylene (see col. 8, lines 34-37). Regarding claim 4, note a core layer comprising polypropylene and a second cavitating agent (see col. 5, lines 20-25) wherein the core layer has a first side and a second side and the first side of the core layer is adjacent to the second side of the first skin layer. Regarding claim 7, note a second skin layer comprising polypropylene having a first side and a second side wherein the first side of the second skin layer is adjacent to the second side of the core layer (see col. 11, lines 10-13 and col. 12, lines 10-12). Regarding claim 10, note the core is cavitated (see col. 11, lines 53-65). Regarding claim 11, note the first skin layer comprises at least about 15% by weight of the thermoplastic label (see col. 11, lines 3-6). Regarding claims 12 and 13, note the first cavitating agent is calcium carbonate (see col. 8, lines 12-15). Regarding claims 14 and 15, note the label has a thickness from about 3 mils to about 5 mils and from about 1 mil to about 10 mils (see col. 7, lines 4-7). Regarding claim 16, note the label is biaxially oriented (see col. 11, line 18). Regarding claims 17-19, note the first cavitating agent comprises at least about 25%, 35% and 50% by weight of the first skin layer (see col. 8, lines 21-24). Regarding claim 20, note the thermoplastic is polypropylene and the polypropylene

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comprises homopolymer polypropylene (see col. 8, lines 34-38). Regarding claim 21, note the thermoplastic is polypropylene and the polypropylene comprises homopolymer polypropylene (see col. 8, lines 34-38) and wherein the cavitating agent comprises at least about 25% by weight of the first skin layer (see col. 8, lines 21-24). Regarding claim 22, note the second cavitating agent is selected from the group consisting of polyamides, polybutylene terephthalate, acrylic resins, acetals, solid or hollow preformed glass spheres, metal beads or spheres, ceramic spheres (see col. 6, lines 41-49 and 62-65). Regarding claim 23, note the second cavitating agent is polybutylene terephthalate (see col. 6, lines 41-43).

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 9. Claims 1-3, 14, 15, 24 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Dronzek, Jr. (6,517,664).

Regarding **claims 1** and **24**, Dronzek, Jr. discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated (see col. 9, lines 55-57 and col. 10, lines 33-35) and a cold glue adhesive on the first side of the first skin layer (see col. 7, lines 61-67 and col. 8, lines 1-4). Regarding **claim 2**, note the polypropylene skin layer has a thickness of at least about .3 mil (see col. 9, line 56). Regarding **claim 3**, note the thermoplastic is polyethylene (see col. 5, lines 15-19).

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Regarding **claims 14** and **15**, note the label has a thickness from about 3 mils to about 5 mils and about 1 mil to about 10 mils (see col. 9, lines 25-27 and 55-57).

Regarding claim 25, Dronzek, Jr. discloses a container having a thermoplastic label comprising a surface of the container, a cold-glue adjacent to the surface (see col. 10, lines 45-57 and col. 12, lines 15-24); a label comprising a first skin layer comprising polypropylene and a first cavitating agent (see col. 5, lines 15-16) wherein the first skin layer has a first side and a second side and the first skin layer is cavitated and the first side is adjacent to the cold glue (see col. 12, lines 15-24).

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 5, 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swan et al. (4,965,123) in view of Marotta et al. (5,888,640).

Swan et al. discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated and a cold glue adhesive on the first side of the first skin layer and further a cavitated core layer and a second polypropylene skin layer. However, Swan et al. fails to disclose a tie layer comprising polypropylene wherein the tie layer has a first side and a second side and the first side of the tie layer is adjacent to the second side of the first skin layer and a metal layer on the second side of

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the second skin layer. Marotta et al. teaches that it is old and well-known in the analogous art to have a tie layer comprising polypropylene adjacent a first skin layer (see col. 6, lines 12-14 and 20) and a metal layer on the second side of a second skin layer (see col. 8, lines 31-32) for the purpose of producing a biaxially oriented thermoplastic label to be adhered to a container. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the label in Swan et al. with a tie layer comprising polypropylene wherein the tie layer has a first side and a second side and the first side of the tie layer is adjacent to the second side of the first skin layer and a metal layer on the second side of the second skin layer as suggested by Marotta et al. in order to produce a biaxially oriented thermoplastic label to be adhered to a container.

12. Claims 4-10, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan (4,701,369) in view of Marotta et al. (5,888,640).

Duncan discloses a thermoplastic label for use with a cold glue adhesive comprising a first skin layer comprising a thermoplastic (polypropylene) and a first cavitating agent, wherein the first skin layer has a first side and a second side, and the first skin layer is cavitated (see col. 7, lines 12-24) and a cold glue adhesive on the first side of the first skin layer (see col. 7, lines 65-66) and further a polypropylene core layer (see col. 2, lines 65-67) and a second skin layer comprising polypropylene (see col. 3, lines 19-22). However, Duncan fails to disclose a cavitated core layer, a tie layer comprising polypropylene adjacent to the second side of the first skin layer and a metal layer on the second side of the second skin layer. Marotta et al. teaches that it is old and well-known in the analogous art to have a tie layer comprising polypropylene adjacent a first skin layer (see col. 6, lines 12-14 and 20) and a metal layer on the second side of a second skin

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layer (see col. 8, lines 31-32) and a cavitated core layer (see col. 5, lines 55-64) for the purpose of producing a biaxially oriented thermoplastic label. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the label in Duncan with a cavitated core layer, a tie layer comprising polypropylene adjacent to the second side of the first skin layer and a metal layer on the second side of the second skin layer as suggested by Marotta et al. in order to produce a biaxially oriented thermoplastic label.

13. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dronzek, Jr. (6,517,664) in view of Swan et al. (4,965,123).

Dronzek, Jr. discloses a container having a thermoplastic label comprising a surface of the container; a cold-glue adjacent to the surface (see col. 10, lines 45-57 and col. 12, lines 15-24); a label comprising a first skin layer comprising polypropylene and a first cavitating agent (see col. 5, lines 15-16) wherein the first skin layer has a first side and a second side and the first skin layer is cavitated and the first side is adjacent to the cold glue (see col. 12, lines 15-24). However, Dronzek, Jr. fails to disclose a core layer comprising polypropylene and a second cavitating agent having a first side and a second side wherein the first side of the core layer is adjacent to the second side of the first skin layer. Swan et al. discloses a cavitated core layer comprising polypropylene adjacent a cavitated polypropylene skin layer (see col. 5, lines 21-25) for the purpose of producing a thermoplastic label to be adhered to a container surface.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided a cavitated polypropylene core layer adjacent the cavitated polypropylene skin layer in Dronzek, Jr. as suggested by Swan et al. in order to produce a thermoplastic label to be adhered to a container surface.

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Response to Arguments

14. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Catherine Simone Examiner

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August 13, 2004

HAROLD PYON
SUPERVISORY PATENCEXAMINED

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